

In the Claims:

Please enter the following amended claims 10, 14, and 18:

10. (Once Amended) A process for etching silicon oxynitride which comprises the steps of:

depositing a layer of polycrystalline silicon overlying a substrate;

depositing a layer of silicon oxynitride overlying the layer of polycrystalline silicon;

① pattern etching the layer of silicon oxynitride and the layer of polycrystalline silicon; and

etching the remaining layer of silicon oxynitride in a phosphoric acid etchant without subjecting the layer of silicon oxynitride to any temperature greater than about 400°C after the step of depositing the layer of silicon oxynitride.

14. (Once Amended) A process for fabricating a semiconductor device comprising the steps of:

② depositing a layer of polycrystalline silicon overlying a substrate;

depositing a first layer of oxide to a thickness of between about 7.5nm and 10nm by chemical vapor deposition from a TEOS source overlying the layer of polycrystalline silicon;

depositing a second layer of silicon oxynitride overlying the first layer to a thickness of between about 25nm and about 30nm by plasma enhanced chemical vapor deposition;

pattern etching the first and second layers and the layer of polycrystalline silicon;

and

①2 etching the second layer in an etchant comprising hot phosphoric acid, the etching occurring before the second layer is subjected to any temperature greater than about 400°C.

18. (Thrice Amended) A process comprising:

providing a semiconductor substrate;

forming a gate oxide above the semiconductor substrate;

①3 forming a first polycrystalline silicon layer over the gate oxide;

forming an interpoly dielectric;

forming a second polycrystalline silicon layer over the interpoly dielectric;

depositing a layer of silicon oxynitride above the second polycrystalline silicon layer;

pattern etching the device to form a stack; and

removing the layer of silicon oxynitride without subjecting the layer of silicon oxynitride to a temperature greater than about 400°C after the step of depositing the layer of silicon oxynitride.

Please cancel claim 19.

Please enter the following amended claims 20 and 24:

D4 20. (Once Amended) The process of claim 18, wherein the layer of silicon oxynitride is deposited by a plasma enhanced chemical vapor deposition process using the reactants N_2O and SiH_4 .

D5 24. (Once Amended) The process of claim 18, wherein the removing of the layer of silicon oxynitride comprises the step of etching with hot phosphoric acid.

☒ Please cancel claim 25.

Please enter the following amended claim 26:

D6 26. (Twice Amended) A process comprising:
depositing a layer of polycrystalline silicon over a substrate;
depositing a layer of silicon oxynitride above the layer of polycrystalline silicon;
pattern etching the layer of silicon oxynitride and the layer of polycrystalline silicon to form a stack; and

removing the layer of silicon oxynitride before subjecting the layer of

D6 and silicon oxynitride to a temperature greater than about 400°C after the step of depositing the layer of silicon oxynitride.

✓
Please ~~cancel~~ claim 27.

Please enter the following amended claims 28 and 31:

D7 28. (Once Amended) The process of claim 26, wherein the layer of silicon oxynitride is deposited by a plasma enhanced chemical vapor deposition process using the reactants N_2O and SiH_4 .

D8 31. (Once Amended) The process of claim 26, wherein the removing of the layer of silicon oxynitride comprises the step of etching with hot phosphoric acid.

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Please ~~cancel~~ claim 32.